

## AMENDMENTS TO THE CLAIMS

1-19. (Canceled)

20. (Once Amended) A non-blocking mechanical fiberoptic matrix switch, comprising:

N input optical fibers;

M output optical fibers;

a first plurality of stages each supporting a ferrule surrounding an end portion of a corresponding one of the N optical fibers;

a second plurality of stages each supporting a ferrule surrounding an end portion of a corresponding one of the M optical fibers;

means for translating the stages along a plurality of orthogonal X and Y axes to align a facet of a selected one of the N input optical fibers with a facet of a selected one of the M output optical fibers;

a central panel having a plurality of holes, each hole being sized for having the ferrule surrounding a selected one of the N input optical fibers inserted into a first end of a selected hole in order to mate the facet of the selected one of the N input optical fibers with the facet of the selected one of the M output optical fibers having the ferrule surrounding its end portion inserted into a second end of the selected hole; and

means for moving the ferrules relative to the stages along a plurality of Z axes generally perpendicular to the X and Y axes to mate and un-mate the facets of the selected input and output optical fibers.

21-25. (Canceled)

26. (Previously Added) The switch of Claim 20 and further comprising spring means for biasing the ferrules to mated positions.

27. (Previously Added) The switch of Claim 20 wherein the holes in the central panel are tapered to facilitate alignment and insertion of the ferrules into the holes.

28. (Previously Added) The switch of Claim 20 wherein the means for moving the  
2 ferrules includes a plurality of solenoid actuators.